

## ABSTRACT

A method and apparatus for processing a received signal containing a desired burst and a co-channel interferer burst are disclosed. The invention includes receiving the received signal from a front end receiver. A time offset between the desired burst and the co-channel interferer burst is detected. A detection procedure is then selected based on the time offset between the desired burst and the co-channel interferer burst. Preferably, one of three detection procedures is selected based on the time offset detected and optionally the signal strength of the co-channel interferer burst. If a first or second time offset is detected, then a joint detection or an iterative detection procedure is selected and performed, respectively. Finally, if a third time offset is detected or if the co-channel interferer has a low signal strength, then a conventional detection procedure is selected and performed.